



New Frontiers 2009
Preproposal Conference

AO Evaluation and the Selection Process

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NASA Headquarters

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Agenda

8:30	Welcome and Introduction	James Green, NASA/HQ
8:45	AO Evaluation and Selection	Paul Hertz, NASA/HQ
9:00	Science Evaluation	Tom Morgan, NASA/HQ
9:30	TMC Evaluation	Jay Bergstralh, NASA/LaRC
10:00	Break	
10:15	Expendable Launch Vehicles	Rex Engelhardt, NASA/KSC
10:40	Deep Space Network	Barry Geldzahler, NASA/HQ
11:00	Astromaterials Curation	Marilyn Lindstrom, NASA/HQ
11:20	Archiving and PDS	Reta Beebe, New Mexico St. U.
11:40	Education and Public Outreach	Stephanie Stockman, NASA/HQ
12:00	Lunch	
1:00	Wrap-up with answers to questions	All



The New Frontiers AO Program Team

NASA Headquarters

- Tom Morgan, Program Scientist
- Adriana Ocampo, Program Executive

NASA Langley Research Center

- Jay Bergstralh, Program Acquisition Manager

NASA Marshall Space Flight Center

- Dennon Clardy, Program Manager

NASA Glenn Research Center

- David Anderson, ISTP Project Manager

NASA Kennedy Space Center

- Rex Engelhardt, Launch Service Mission Manager



The New Frontiers AO

- Solicits a PI-led space science investigation for the third New Frontiers mission
 - All proposed investigations must address the science objectives for one (or more) of eight mission concepts identified by the Decadal Survey and confirmed by the NOSSE report
- Is open to all proposers and proposer-teams
 - NASA has established firewalls to isolate program personnel, AO developers, and technical reviewers from proposal teams
- Starts a two step process
 - Step 1 is the AO, proposals, evaluation of proposals, and selection of approximately three proposals for a Phase A concept study
 - Step 2 is the Phase A concept study, evaluation of concept study reports, site visits, and downselection of one mission concept for continuation toward flight



Requirements

- It is NASA's intent that all proposal requirements are clearly identified (and numbered) in the AO.
- The AO contains 89 numbered requirements
 - These provide the requirements for what constraints your proposed mission must meet, what must be in your proposal, how your proposal must be submitted.
- Appendix B of the AO contains 72 numbered requirements
 - These provide direction on the required structure and content of your proposal.
- It is not our intent to repeat all 161 requirements here. It is our intent to answer all of your questions about the requirements.



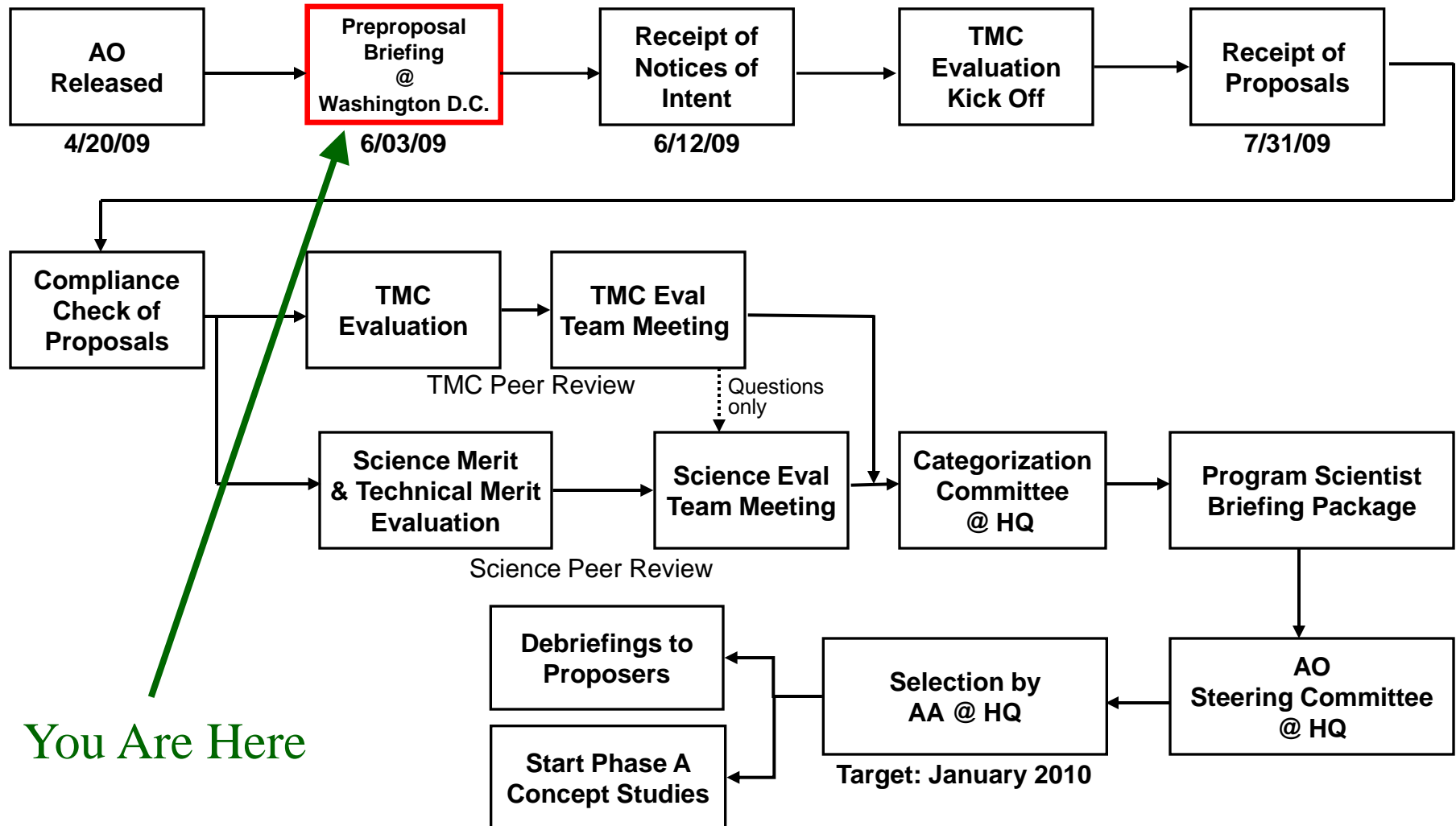
Compliance

- All requirements are requirements, but they are checked in two different ways
- Proposals screened against the compliance checklist in Appendix F upon receipt.
 - Proposals that do not comply may be declared noncompliant and returned to the proposer without further review.
 - Administrative: On time, signed, page limits, NSPIRES, etc.
 - Scientific: One of 8 missions, traceability, archiving, threshold, etc.
 - Technical: Complete mission, cost cap, launch date, letters, etc.
- Additional compliance checks occur during the evaluation process.
 - Proposals that do not comply may be declared noncompliant and returned to the proposer without further review.
 - Proposals that do not comply may receive a weakness during the evaluation.



New Frontiers 2009

Proposal Evaluation & Selection Process



You Are Here



Evaluation Criteria (§7.2)

- Scientific Merit
 - Compelling nature and scientific priority
 - Programmatic value
 - Likelihood of scientific success
 - Scientific value of the Threshold Science Mission
- Scientific Implementation Merit and Scientific Feasibility
 - Merit of the instruments and mission design
 - Probability of technical success
 - Merit of the data analysis plan
 - Science resiliency
 - Probability of science team success
 - Merit of any science enhancement options, if proposed
- TMC Feasibility of Mission Implementation, including Cost Risk
 - Adequacy and robustness of the technical plan
 - Adequacy and robustness of the cost plan and schedule
 - Adequacy of the management approach
 - Adequacy of the risk management approach
 - Technical readiness



Categorization (§7.1)

- Category I. Well conceived and scientifically and technically sound investigation pertinent to the goals of the program and the AO's objectives and offered by a competent investigator from an institution capable of supplying the necessary support to ensure that any essential flight hardware or other support can be delivered on time and that data can be properly reduced, analyzed, interpreted, and published in a reasonable time. Investigations in Category I are recommended for acceptance and normally will be displaced only by other Category I investigations.
- Category II. Well conceived and scientifically or technically sound investigations which are recommended for acceptance, but at a lower priority than Category I.
- Category III. Scientifically or technically sound investigations which require further development. Category III investigations may be funded for development and may be reconsidered at a later time for the same or other opportunities.
- Category IV. Proposed investigations which are recommended for rejection for the particular opportunity under consideration, whatever the reason.

In response to AOs, NASA usually selects and funds only Category I investigations.



Evaluation Criteria

- Scientific merit of the proposed investigation [40%]
- Scientific implementation merit and scientific feasibility of the proposed investigation [30%]
- Technical, management, and cost (TMC) feasibility, including cost risk, of the proposed investigation [30%]
 - Weights are for categorization
- Student collaborations will be evaluated only for the impact they have on scientific feasibility or TMC feasibility to the extent that they are not separable. The intrinsic merit of SCs will not be evaluated in Step 1
- Core E/PO is neither proposed nor evaluated in Step 1.



Selection (§7.3)

- Selection Official: Associate Administrator of SMD
- Selection Board: SMD Science Management Council
 - DAAs, Chief Scientist, Division Directors
- Selection Factors
 - Categorization
 - Proposal evaluations based on published criteria
 - Past performance, especially in meeting cost and schedule
 - Cost to NASA
 - Programmatic factors including planning and policy considerations, available funding, maintaining programmatic and scientific balance
- Overriding consideration: maximize scientific return and minimize implementation risk while advancing NASA's science goals and objectives within the available budget for this program
 - NASA's science program is an evolving activity; selection official will use all available science planning, policy, and cost considerations



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